

REMARKS/ARGUMENTS

I. Introduction:

Claims 1, 3, 8, and 11 are amended, claim 2 is canceled, and claims 18-21 are added herein. With entry of this amendment, claims 1 and 3-21 will be pending. In light of the amendments and following remarks, Applicant believes that all the claims are in condition for allowance.

II. Claim Rejections – 35 U.S.C. 101:

Claims 1-8 and 11-15, as amended, are believed to comply with 35 U.S.C. 101.

III. Claim Rejections – 35 U.S.C. 103:

Claims 1-17 stand rejected under 35 USC 103(a) as allegedly being unpatentable over U.S. Patent No. 5,710,885 (Bondi) in view of U.S. Patent No. 6,014,707 (Miller et al.). Applicant respectfully traverses the rejection.

Bondi is directed to a network management system with improved node discovery and monitoring. Nodes to be polled are stored in a queue and poll requests are sent at a rate determined by the rate controlling mechanism. As shown in Fig. 3, the system uses a queue 10 which stores the identity of the nodes which are awaiting transmission of a poll, and is preferably a FIFO or FCFS queue. A rate control mechanism 12 controls the rate at which the pings are sent on the network to the nodes. The system allows an arbitrary number of nodes to be polled concurrently without receiving an acknowledgement. The rate control mechanism is used to prevent the network from being flooded with pings. The system schedules the pings for transmission in rapid succession at a controlled rate.

Bondi does not show or suggest advancing to a next set of a list of sets, as suggested by the Examiner. In contrast to applicant's invention, Bondi arranges a plurality of node identities in a single queue in an order of transmission of polling messages to the nodes and schedules the pings for transmission in rapid succession from the queue. Thus, Bondi moves directly from one node identifier to the next in the same queue. Bondi does not advance to a subsequent set of list of sets.

Furthermore, as noted by the Examiner, Bondi does not disclose a circular list of sets. The Examiner cites Miller et al. as disclosing a circular list of sets. The Miller et al. patent is directed to stateless data transfer protocol with client controlled transfer unit size. In order to initiate a data transfer, a client sends a request to a server containing the desired file name, the bytes of the files that are to be transferred, and the maximum PDU size and rate that are to be used in the transmission. When the file is prepared for transmission, a record containing the particulars of the requested download is created and placed into a PDU scheduling queue. The PDU scheduling queue may be constructed as a circular queue of scheduling timeslots. At periodic intervals, each timeslot in the PDU scheduling queue is checked in sequence for any download records to be serviced. As discussed in Amendment A dated April 4, 2005, a circular queue is not the claimed circular list of sets. A circular queue is an implementation of a queue using a common data structure – the array. The circular part of a circular queue is that the queue elements can wrap around the bounds of the array. (See, for example, Col. 11, lines 4-8 of the Miller et al. patent, "There must be more scheduling timeslots . . . in order to ensure that rescheduling a download record 36 for the maximum inter-PDU delay does not result in wrapping around the circular queue.")

Even assuming, for the sake of discussion, that one would look to Miller et al. to find a way to queue the nodes in the system of Bondi et al., this would not necessarily lead to Applicant's invention. In particular, the invention defined by claim 1 requires a set of identifiers in a circular list of sets. However, Miller et al. simply disclose using a circular queue. As such, changing the FIFO queue of Bondi et al. to a circular queue would not lead a person of ordinary skill in the art to the invention of claim 1.

The other pending claims include similar features so they are patentably distinct for at least the same reasons.

IV. Conclusion

For the foregoing reasons, Applicant believes that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,



Cindy S. Kaplan
Reg. No. 40,043

P.O. BOX 2448
SARATOGA, CALIFORNIA 95070
Tel: 408.399.5608
Fax: 408.399.5609